

## **ABSTRACT**

An inline backwash, flushing filter assembly comprising a header assembly, a rotatable valve assembly, and a filter element assembly disposed within a filter housing assembly. In operation, the controller moves the turn knob of the rotatable valve assembly a one-quarter turn which results in the reversal of fluid flow through the assembly to periodically back flush the filter utilizing fluid from the system inlet. Debris removed from the filter element during the backwash process are immediately discharged from the system through a drain port. Simultaneously, the hydraulic shearing mechanism of the backwash process dislodges and drains debris which may have accumulated on the screen and at the bottom of the lower filter assembly during normal filter operations. The controller then returns the filter assembly to filtration operation by a reverse one-quarter turn of the turn knob of the rotatable valve assembly.